

REMARKS

Claims 12-28 are pending. By this amendment, claim 20 has been amended to correct an informality. In addition, the specification has been amended and new Figures 4A and 5A are added. Support for the present amendment to the specification and the addition of new Figures 4A and 5A can be found at page 5, line 1 – page 6, line 7 of the application as well as in claim 16 as originally filed. No new matter has been introduced by way of these amendments.

Drawings

In the Office Action of August 10, 2005, the drawings were objected to as being informal. In response, Applicants submit the attached formalized drawings.

In addition, the drawings were objected to under 37 C.F.R. § 1.83(a) for failing to show every feature of the invention specified in the claims. More specifically, the drawings were objected for failing to show the limitations found in claim 16 relating to the second dispersion plate including a plurality of second perforations. In response, Applicants submit new Figures 4A and 5A depicting the second dispersion plate including a plurality of perforations configured differently from the dispersion plate of Figures 4 and 5. Applicants respectfully submit that no new matter has been introduced by way of introduction of Figures 4A and 5A, as well as the corresponding amendments to the specification. In view of the submission of formal drawings as well as the inclusion of Figures 4A and 5A, Applicants respectfully request said objections to the drawings be withdrawn.

Claim Objections

In the Office Action dated August 10, 2005, claim 20 was objected to due to informalities in claiming a Markush group. In response, Applicants have amended claim 20 as suggested in the Office Action. Applicants respectfully request said objection to claim 20 be withdrawn.

Claim Rejections – 35 USC § 103

U.S. Patent No. 6,481,449 to Manchester in view of U.S. Patent No. 3,809,050 to Chough

In the Office Action dated August 10, 2005, claims 12-14, 16-24 and 26-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,481,449 to Manchester in view of U.S. Patent No. 3,809,050 to Chough. In combining Manchester and Chough, it is put forth that it would be obvious to have combined the ultrasonic transducer assembly of Manchester with a dispersion plate for the purpose of increasing the contact area of the object to be cleaned with the cleaning solution.

Without commenting on the suitability or desirability of such a combination, Applicants respectfully point out that the subject matter as presently claimed in independent claims 12 and 17 is directed to the use of a dispersion plate for creating a laminar flow pattern in an upper portion of a cleaning tank so as to carry dislodged particulates from an electronic component out of the cleaning tank and into an overflow weir. The use of said dispersion plate is described within the application as originally filed at page 7, line 14 – page 9, line 5.

When applying 35 USC § 103 to obvious rejections, four tenets of patent law must be considered. (1) The claimed invention must be considered as a whole; (2) The references must be considered as a whole and must suggest the obviousness of making the combination; (3) The references must be viewed without the benefit of impermissible hindsight vision afforded by the

claimed invention and (4) Reasonable expectation of success is the standard with which obviousness is determined. MPEP 2141.

As discussed above, pending independent claims 12 and 17 are directed to the use of a vertical laminar flow pattern in an upper portion of a cleaning tank to remove and overflow contaminants from a cleaning tank. The formation of this laminar flow pattern is through the use of a dispersion plate sealingly mounted between an upper tank portion and a lower tank portion utilizing a flanged arrangement so as to avoid obstructions in the cleaning tank, which could interfere with laminar flow pattern. Neither Manchester nor Chough contain any disclosure relative to the creation of a vertical laminar flow pattern by flange mounting a dispersion plate between upper and lower portions of a cleaning tank. Applicants respectfully assert that the proposed combination of Manchester and Chough does not satisfy the first tenet of patent law relative to 35 USC § 103 rejections in that claims 12 and 17 have not been considered as a whole. Furthermore, even if claims 12 and 17 were considered as a whole, the proposed combination of Manchester and Chough fails to establish a case of *prima facie* obviousness.

*Prima facie* obviousness is not established if all the elements of the rejected claim are not disclosed or suggested in the cited art. In re Ochiai, 37 USPQ 1127, 1131 (Fed. Cir. 1995). ("The test for obviousness *vel non* is statutory. It requires that one compare the claims' 'subject matter as a whole' with the prior art 'to which said subject matter pertains.'"). See also, MPEP 2143.03 "All Claim Limitations Must Be Taught or Suggested," citing In re Royka, 180 USPQ 580 (CCPA 1974). "To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art." MPEP 2143.03.

As admitted in the Office Action, Manchester fails to disclose an assembly comprising an upper and lower portion which are sealingly connected about a removable and configurable

dispersion plate. Similarly, Chough is absent any disclosure relative to a cleaning tank have an upper and lower portion which are sealingly connected about a removable and configurable dispersion plate. Instead, Chough discloses adhering a wafer W to a mounting block 11 using a plurality of apertures 14 in the mounting block to vacuum secure the wafer to the mounting block without touching the device surface of the wafer. The mounting block 11 comprises a lower flange 13 provided with a notch 17 and flats 18, 19 for orientation purposes. Chough lacks any teaching or suggestion that the lower flange 13 could be utilized to sealing connect an upper tank portion and lower tank portion nor does Chough including any teaching or suggestion that the mounting block 11 creates a vertical laminar flow in an upper tank portion, wherein each of these limitations are present within pending independent claims 12 and 17. As neither Manchester nor Chough teach or suggest the limitations within pending independent claims 12 and 17, the proposed combination of Manchester and Chough do not render independent claims 12 and 17 as *prima facie* obvious and an action acknowledging the same is respectfully requested. While Applicants do not acquiesce with respect to specific comments directed against dependent claims 13, 14, 16, 18-24, 26 and 27, Applicants do not comment further on these issues presently since they are moot in view of the above comments.

Manchester in view of Chough and further in view of U.S. Patent No. 4,003,798 to McCord

In the Office Action dated August 10, 2005, claims 15 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Manchester in view of Chough as further in view of U.S. Patent No. 4,003,798 to McCord. In combining McCord with Manchester and Chough, it is put forth that the combination of Manchester and Chough discloses the claimed invention except

for the filter while McCord discloses the use of a recirculation system including a pump 27 and filter 29.

As set forth previously, the proposed combination of Manchester in view of Chough fails to render independent claims 12 and 17 as *prima facie* obvious. McCord is directed to a vapor generating and recovering apparatus. McCord lacks any teaching or suggestion relative to sealingly connecting an upper tank portion and lower tank portion with a dispersion plate nor does McCord teach or suggest the use of a dispersion plate mounted between the upper and lower tank portions to create a vertical laminar flow in an upper tank portion as presently claimed within pending independent claims 12 and 17. As McCord fails to cure the aforementioned deficiencies of the Manchester and Chough combination, the combination of Manchester, Chough, and McCord fail to render independent claims 12 and 17 as *prima facie* obvious. While Applicants do not acquiesce with respect to specific comments directed against dependent claims 15 and 28, Applicants do not comment further on these issues presently since they are moot in view of the above comments.

Manchester in view of Chough

In the Office Action dated August 10, 2005, claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Manchester in view of Chough as applied to claims 12-14. As discussed previously, the combination of Manchester and Chough fails to render independent claim 17 as *prima facie* obvious. As such, the rejection of dependent claim 25 is moot in view of the above comments.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

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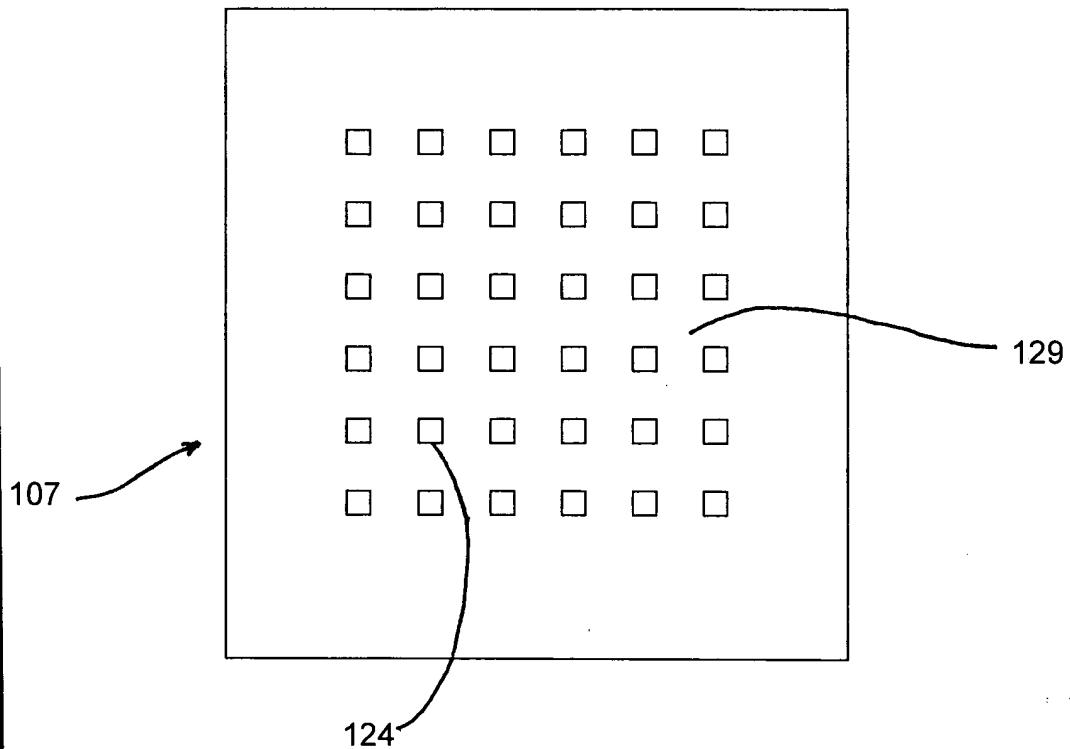
AMENDMENTS TO THE DRAWINGS

New Figures 4A and 5A are attached.

Attachment: Replacement Sheets \*[Include Replacement Sheet Drawing Labels (Document #110150-Avery Label 5160) on front of Replacement Sheet(s) (**clean, annotated or new sheets**) centered in the one-inch top margin]\*



**Fig. 4A**



**Fig. 5A**

